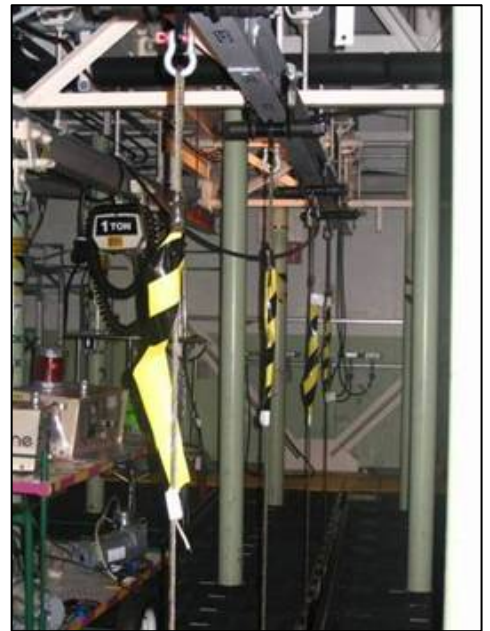


Spent Nuclear Fuel (SNF) Stabilization and Disposition Storage Operations (HQ-0012X); and SNF Stabilization and Disposition (RL-0012)

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Workers installing Liner 104 in the back section of the 105KE Weasel Pit



Fuel racks "suspended" on trolleys to facilitate debris removal and unobstructed vacuuming in K East

Overview

This section addresses work in Project Baseline Summary (PBS) HQ-0012X, *Spent Nuclear Fuel Stabilization and Disposition Storage Operations*; and RL-0012, *Spent Nuclear Fuel Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2005.

Notable Accomplishments

PBS RK-0012, SNF Stabilization and Disposition

Sludge Retrieval and Treatment: Reached 64 percent containerization of K East sludge (26.9 m³ of 42.0m³) and completed all sludge and debris removal from the Weasel Pit. Large Diameter Container (LDC) number three (of four) was filled and removed on May 12, 2005, and is awaiting shipment to T Plant for treatment. K West removed 99 percent of canisters and completed removal of all racks needed to allow installation of sludge containers as of May 19, 2005.

Multi-Canister Overpack (MCO) Welding at the Canister Storage Building (CSB): Completed the welding and "N" stamp of all 379 MCOs (less 7 MCOs in the monitoring program), and commenced welding the 18 Shippingport Spent Fuel Canisters as of May 19, 2005.

Issues

Sludge Containerization: Slower than planned progress on the containerization of K East Basin sludge has resulted in a delay in completing Tri-Party Agreement (TPA) and DNFSB milestones. The rate of collection supports an August 2005 completion of this activity. On April 28, 2005, the Environmental Protection Agency (EPA) notified RL of a fine for failure to meet TPA M-034-33, *Containerize K East Sludge*. FH continues to make best progress to minimize further delays in K East sludge containerization.

K East/K West Transfer: The K East to K West Sludge Transfer subproject is forecasting delays to the completion of DNFSB milestone 2001-1-CN-120E, *Complete Removal of Containerized Sludge from the K East Basin*, due July 31, 2005. A work stoppage at the transfer system fabricator was resolved on May 5, 2005. However, this delay, coupled with additional time to perform an Operational Readiness Review, results in a forecast completion of December 2005.

Other Waste Shipments: The final box (357 total) of canister waste shipped to the Environmental Restoration Disposal Facility (ERDF) was evaluated to be low-level waste. The Sampling and Analysis Plan has been revised with canister shipments set to resume in June 2005. Included in the TPA fine notification discussed above, EPA also issued a Notice of Violation for failure to follow the EPA approved Sampling and Analysis Plan.

Cost Overruns: The KBC Project spend forecast is trending above the funding target set by FH and the project is evaluating actions to control spending. Actions under consideration include further deceleration of the Balance of Sludge Treatment subproject activities, and limited deferral of sludge and deactivation activities planned for FY 2005.

FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
HQ-0012X SNF Stabilization and Disposition Storage Ops	\$ 0.9	\$ 0.9	\$ 0.0
RL-0012 SNF Stabilization & Disposition	\$ 130.1	\$ 139.1	\$ -9.0
Total	\$ 131.0	\$ 140.0	\$ -9.0

FY 2005 Schedule/Cost Performance (\$M)

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
HQ-0012X	SNF Stabilization and	\$0.8	\$0.8	\$0.7	\$0.0	-0.1%	\$0.0	3.6%	\$0.9
RL-0012	SNF Stabilization & Disposition	\$66.2	\$62.8	\$88.4	-\$3.5	-5.2%	-\$25.6	-40.8%	\$120.4
Total		\$66.9	\$63.5	\$89.1	-\$3.5	-5.4%	-\$25.6	-40.2%	\$121.3

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

Schedule Performance (-\$3.5M/-5.4%): The variance is due to:

- North Loadout Pit sludge collection and treatment (-\$2.6M).
- Delays in K East basin sludge containerization (-\$0.5M).
- Delays in K West Transfer System and Fuel Retrieval (-\$4.7M).
- Delayed receipt of hydrolasing tools and miscellaneous D&D (-\$1.8M).

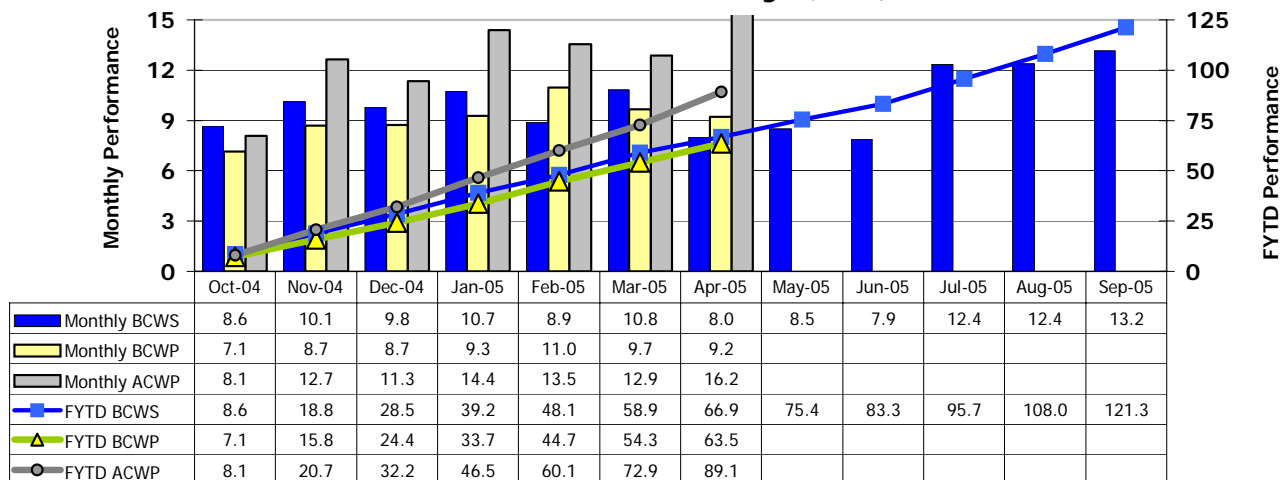
The unfavorable schedule variance is partially offset by a favorable schedule variance for completing MCO movement activities that were budgeted to be completed in FY 2004 (+\$1.6M), completing sludge carryover activities (\$+1.3M), MCO welding ahead of schedule (+\$0.2M), and Sludge Treatment acceleration from FY 2006 (+\$3.0M).

Cost Performance (-\$25.6M/-40.2%): The variance is due to:

- Overruns during completion of fuel movement (no budget) (-\$1.5M).
- Unplanned Ion Exchange Module procurement required due to water clarity issues requiring increased replacement frequency (-\$0.6M).
- Labor/material overruns in Safe and Compliant activities due to underestimated requirements and the delay in ramp-down from fuel removal activities (-\$3.1M).
- Increased cost in Sludge Retrieval activities (K East Containerization, Sludge Transfer System, K West Retrieval, etc.) due to slower progress resulting in higher labor costs for the work being completed. Procurement of additional materials such as cameras, tools, and filters to resolve water visibility problems (-\$22.1M), and D&D labor rates and technical requirements (-\$1.7M).
- Offset by efficiencies at the CSB (+\$0.7M) and Closure Services (+\$1.1M), temporary underruns in North Load Out Pit (NLOP) until the Baseline Change Request to transfer work scope to Waste Management is completed (+\$1.8M), and labor underruns in sludge treatment (+\$0.8M).

FY 2005 Schedule/Cost Performance, continued

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

Number	Milestone Title	Type (TPA/PI/ DNFSB)	Due Date	Actual Date	Forecast Date	Status / Comments
M-034-18B (S00-00-902) (S10-05-012)	Complete removal of all K Basin SNF	TPA/DNFSB/ PI	07/31/04	10/15/04		Complete
DNFSB 2001-1 (S10-05-012)	Remove SNF from K Basins	DNFSB	07/31/04	10/12/04		Complete
RL-12-1.aa (S10-99-960)	Complete SNF Removal from K West	PI	08/31/04	10/15/04		Complete
RL12-1.cd (S10-99-977)	Initiate Full Scale K East Water Removal	PI	09/30/04	09/19/04		Complete
M-034-33A (S10-05-009)	Initiate Sludge Containerization	TPA	10/31/04	10/31/04		Complete
DNFSB 121 (S10-05-013)	Select Sludge Treatment Method	DNFSB	11/30/04	11/15/04		Complete
RL-12-1.c (S10-99-966)	Complete K East Discharge Chute Immobilization	PI	12/30/04	08/20/04		Complete
DNFSB 119E (S10-05-014)	Complete K East Sludge Consolidation	DNFSB	12/31/04		08/10/05	Behind Schedule
RL-12-1.ba (S10-99-083)	Treat 1 Cubic Meter of Sludge	PI	02/28/05		09/30/05	Behind Schedule
M-034-33B (S10-05-018)	Complete K East Sludge Containerization	TPA	03/01/05		08/10/05	Behind Schedule
S10-99-80	Complete MCO Welding	PI	06/30/05			On Schedule
DNFSB 120E (S10-05-015)	Complete K East Basin Sludge Removal	DNFSB	07/31/05		12/19/05	Behind Schedule
RL-12-1.b (S10-99-082)	Transfer K East Sludge to K West Containers	PI	07/31/05		12/19/05	Behind Schedule
RL-12-1.bb (S10-99-963)	Transfer Found Fuel and Fuel Scrap from K East to K West	PI	07/31/05			On Schedule
M34-21-T1 (S10-99-951)	Initiate Full Scale K West Basin Water Removal	TPA	12/31/05			On Schedule
RL-12-1.cg (S10-99-973)	Immobilize K West Discharge Chute	PI	12/31/05			On Schedule
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	01/31/06			On Schedule
RL-12-1.ch (S10-99-976)	Complete Removal of Contaminated Fuel Canisters	PI	01/31/06		07/31/05	Ahead of Schedule
RL-12-1.ce (S10-99-978)	Complete K East Water Removal	PI	01/31/06			On Schedule
DNFSB 119W (S10-05-016)	Complete K West Sludge Containerization	DNFSB	02/28/06			On Schedule
RL-12-1.ca (S10-99-967)	Encapsulate 3 K East Bays	PI	02/28/06			On Schedule
RL-12-1.bd (S10-99-965)	Commencement of Floor and Canister Sludge Treatment	PI	03/30/06		09/30/06	Behind Schedule
RL-12-1.cb (S10-99-968)	Remove K East Superstructure	PI	03/30/06			On Schedule
M-034-35 (S10-05-011)	Containerize K West Sludge	TPA	06/30/06			On Schedule
RL-12-1.cc (S10-99-969)	Complete First K East Basin Section Disposal	PI	07/31/06			On Schedule
RL-12-1.ci (S10-99-971)	Decon/Immobilize K West Basin Wall (7600 sq. ft.)	PI	08/31/06			On Schedule
RL-12-1.bc (S10-99-081)	Remove Found Fuel and Scrap	PI	09/30/06			On Schedule
RL-12-1.cf (S10-99-972)	Complete K East Basin Removal	PI	09/30/06			On Schedule

NOTE: HQ-0012X has no milestones. Milestones and due dates are derived from the approved Tri-Party Agreement Change Request M-34-04-01.